

United States Department of Agriculture
Animal and Plant Health Inspection Service
4700 River Road
Riverdale, MD 20737

Permit to Move Live Plant Pests, Noxious Weeds, and Soil
Interstate Movement
Regulated by 7 CFR 330

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PERMITTEE NAME:	Dr. Georgios Vidalakis	PERMIT NUMBER:	P526P-18-01680
ORGANIZATION:	Citrus Clonal Protection Program (CCPP)	APPLICATION NUMBER:	P526-180228-010
ADDRESS:	Dept of Microbiology & Plant Pathology University of California Riverside, CA 92521	FACILITY NUMBER:	2487
MAILING ADDRESS:	Dept of Microbiology & Plant Pathology University of California Riverside, CA 92521	HAND CARRY:	No
PHONE:	951-827-3763	DATE ISSUED:	05/01/2018
FAX:		EXPIRES:	05/01/2021
DESTINATION:	Dept of Microbiology & Plant Pathology, University of California, Riverside, CA 92521		
RELEASE:	CCPP-Lindcove Research & Extension Center, 22963 Carson Ave, Exeter, CA 93221, (County: Tulare)		

Under the conditions specified, this permit authorizes the following:

<u>Regulated Article</u>	<u>Life Stage(s)</u>	<u>Intended Use</u>	<u>Shipment Origins</u>	<u>Originally Collected</u>	<u>Culture Designation</u>
Liberibacter africanus (candidatus)	Plant Parts	Therapy and testing and release from federal and state quarantine for planting at the Citrus Clonal Protection Program (CCPP) and National Clean Plant Network (NCPN) Citrus Centers foundation U.S. & evaluation blocks for scientific and commercial use of citrus plant materials that may be infected with citrus pathogens.	TX, AS, GU, HI, PR, VI, Continental	Originally Collected from USA including territories	
Liberibacter americanus (candidatus)	Plant Parts	Therapy and testing and release from federal and state quarantine for planting at the Citrus Clonal Protection Program (CCPP) and National Clean Plant Network (NCPN) Citrus Centers foundation U.S. & evaluation blocks for scientific and commercial use of citrus plant materials that may be infected with citrus pathogens.	TX, AS, GU, HI, PR, VI, Continental	Originally Collected from USA including territories	
Liberibacter asiaticus (candidatus)	Plant Parts	Therapy and testing and release from federal and state quarantine for planting at the Citrus Clonal Protection Program (CCPP) and National Clean Plant Network (NCPN) Citrus Centers foundation U.S. & evaluation blocks for scientific and commercial use of citrus plant materials that may be infected with citrus pathogens.	TX, AS, GU, HI, PR, VI, Continental	Originally Collected from USA including territories	

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Plant Pathogenic Bacteria	Plant Parts	be infected with citrus pathogens. Therapy and testing and release from federal and state quarantine for planting at the Citrus Clonal Protection Program (CCPP) and National Clean Plant Network (NCPN) Citrus Centers foundation U.S. & evaluation blocks for scientific and commercial use of citrus plant materials that may be infected with citrus pathogens.	TX, AS, GU, HI, PR, VI, Continental U.S.	Originally Collected from USA including territories
Plant Pathogenic Fungi	Plant Parts	Therapy and testing and release from federal and state quarantine for planting at the Citrus Clonal Protection Program (CCPP) and National Clean Plant Network (NCPN) Citrus Centers foundation U.S. & evaluation blocks for scientific and commercial use of citrus plant materials that may be infected with citrus pathogens.	TX, AS, GU, HI, PR, VI, Continental U.S.	Originally Collected from USA including territories
Plant Pathogenic Viruses/Viroids	Plant Parts	Therapy and testing and release from federal and state quarantine for planting at the Citrus Clonal Protection Program (CCPP) and National Clean Plant Network (NCPN) Citrus Centers foundation U.S. & evaluation blocks for scientific and commercial use of citrus plant materials that may be infected with citrus pathogens.	TX, AS, GU, HI, PR, VI, Continental U.S.	Originally Collected from USA including territories

PERMIT GUIDANCE

- 1) This permit does not authorize importation, interstate movement, possession, and/or use of strains of genetically engineered regulated organisms (created by the use of recombinant DNA technology).
- 2) If an animal pathogen is identified in your shipment, to ensure appropriate safeguarding, please refer to http://www.aphis.usda.gov/import_export/animals/animal_import/animal_imports_an_products.shtml
- 3) If a human pathogen is identified, please refer to the CDC Etiologic Agent Import Permit Program at <http://www.cdc.gov/od/eaipp/>
- 4) This permit does not fulfill the requirements of other federal or state regulatory authorities. Please contact the appropriate agencies, such as the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, the U.S. Food and Drug Administration, the Centers for Disease Control and Prevention, the APHIS Veterinary Services unit, the APHIS Biotechnology Regulatory Services, or your State's Department of Agriculture to ensure proper permitting.
- 5) If you are considering renewal of this permit, an application should be submitted at least 90 days prior to the expiration date of this permit to ensure continued coverage. Permits requiring containment facilities may take a longer period of time to process.
- 6) When the regulated material includes Domestic soil
You must abide by all local quarantines see: http://www.aphis.usda.gov/planthealth/pests_and_diseases
Of special concern for movement of soil from certain continental areas are: IMPORTED FIRE ANTS: <http://www.aphis.usda.gov/plant-health/ifa>; GOLDEN NEMATODES: <http://www.aphis.usda.gov/planthealth/gna>; POTATO/PALE CYST NEMATODE: <http://www.aphis.usda.gov/planthealth/pcn>

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; PHYTOPHTHORA RAMORUM (Sudden Oak Death): <http://www.aphis.usda.gov/plant-health/sod>

PERMIT CONDITIONS

USDA-APHIS issues this permit to Georgios Vidalakis with University of California at Riverside, CA. This permit authorizes receipt and possession of the quarantine material listed herein from the USA and including territories sources at the designated APHIS inspected approved facility # 2487, under authority of 7 CFR319.37 and 7 CFR 330. The scope of this permit authorization includes propagation of any plant parts that are potentially infected / infested with plant pests; plant pest diagnostic activities, continued curation, maintenance, and use of derived cultures / organisms and infected plant material within the facility according to standard operating procedures incorporated by reference herein; and eventual release of clean plant material into the environment. SOPs are adequate.

1.
 - This permit is issued by the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS). It conveys APHIS regulations and requirements for the material(s) listed on this permit. It does not reduce or eliminate your legal duty and responsibility to comply with all other applicable Federal and State regulatory requirements.
 - The permit number or a copy of the permit must accompany the shipment.
 - You must be an individual at least 18 years old, or legal entity such as partnership, corporation, association, or joint venture.
 - You are legally responsible for complying with all permit requirements and permit conditions.
 - If you violate any applicable laws associated with this permit, you may face substantial civil or criminal penalties. We may cancel all current permits and deny future permit applications.
 - Without prior notice and during reasonable hours, authorized Federal and State Regulators must be allowed to inspect the conditions associated with the regulated materials/organisms authorized under this permit.
2. The permit holder must:
 - maintain a valid PPQ526 permit so long as the regulated materials/organisms are alive or viable,
 - not assign or transfer this permit to other persons without APHIS PPQ authorization,
 - maintain an official permanent work assignment, residence, or affiliation at the address on

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this permit,

- notify the Pest Permit Staff as soon as possible of any change in the permit holder's work assignment, residence, or affiliation,
- notify the Pest Permit Staff of the receipt of unauthorized and/or misdirected shipments of regulated materials/organisms,
- adequately mitigate environmental impacts resulting from unauthorized release of regulated materials/organisms and notify the Pest Permit staff immediately if one occurs,
- notify the Pest Permit Staff if the facility is damaged/destroyed or if you wish to decommission the facility,
- destroy all regulated materials/organisms prior to departure from the organization unless other arrangements are confirmed by the Pest Permit Staff.

Notifications to the Pest Permit Staff must be made via 866-524-5421 or pest.permits@aphis.usda.gov within one business day of the event triggering a notification.

- This permit does not authorize movement or use of plant pathogens listed in the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. If any organism listed as a Select Agent is identified from materials associated with this research, the permit holder is required to notify APHIS, Agriculture Select Agent Services (AgSAS) immediately by phone at 301-851-3300 option 3, and within seven (7) days submit APHIS/CDC Form 4A (Report of Identification of a Select Agent or Toxin in a Clinical or Diagnostic Laboratory) to APHIS, AgSAS; 4700 River Rd, Unit 2, Riverdale, MD 20737 (see instructions at: https://www.selectagents.gov/resources/APHIS-CDC_Form_4_Guidance_Document.pdf). Failure to comply with this requirement is a violation of the Agricultural Bioterrorism Protection Act of 2002. Plant pathogen select agents currently listed include: *Peronosclerospora philippinensis* (*Peronosclerospora sacchari*), *Conothyrium glycines* (formerly *Phoma glycinicola* and *Pyrenochaeta glycines*), *Ralstonia solanacearum*, *Rathayibacter toxicus*, *Sclerophthora rayssiae*, *Synchytrium endobioticum*, and *Xanthomonas oryzae*.
- All persons working with the listed regulated materials/organisms must be informed of these permit conditions. Anyone working with these materials/organisms must agree to and sign/initial these conditions before beginning work. These signed conditions do not need to be submitted to USDA/APHIS but must be readily accessible and made available to Federal and State regulators upon request.

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Note: these conditions may be copied and stored electronically for electronic signature and initialing provided that the permit number, authorized materials/organisms and life stages, release locations if applicable, and authorization statement all appear on the document with the permit number. Signing these conditions only indicates that the person working under this permit has read them; the permit holder is the sole responsible party under this permit.


5. Field-collected samples of infected plant material must be bare-root or washed free of soil prior to shipment to the permit holder.
Plant samples deliberately inoculated with these organisms in a controlled environment such as a laboratory, growth chamber, or greenhouse that have been grown in sterilized soil or soilless mix may be shipped to the permit holder with attached soil or growing media.
6. All packages for transport must minimally consist of both inner/primary and outer/secondary packages securely sealed so that both are effective barriers to escape or unauthorized dissemination of the listed materials/organisms. The inner/primary package(s) will contain all regulated materials/organisms and must be cushioned and sealed in such a way that it remains sealed during shock, impact, and pressure changes that may occur. The outer/secondary shipping container must be rigid and strong enough to withstand typical shipping conditions (dropping, stacking, impact from other freight, etc.) without opening.
7. Upon receipt of the regulated articles at the approved facility, the shipping container should be opened in a secure location as identified in the SOP for the said facility that does not vent into the outside environment. All primary containers must be chilled to a temperature between 1.3 to 3.4 C (35 to 38 F) for 4 hours prior to opening within the certified Biosafety Cabinet Class II, Type A within said facility.

Any indications of mobile plant pests shall require immediate action to safeguard or eliminate the pests sufficiently to prevent dissemination of mobile plant pests outside of the quarantine facility. Any pest findings and necessary reconditioning must be recorded for subsequent reporting. Quarantine and regulated non-quarantine pest detections must be reported to the appropriate personnel of the USDA APHIS PPQ State Plant Health Director's Office within two business days. Notify and seek assistance from the USDA APHIS PPQ State Plant Health Director's Office when unknown or unidentifiable pests are detected. Record all such encounters for subsequent reporting.

All plant material that has been inspected and determined to be visually free of plant pests must be transferred to appropriate media and conditions for subsequent plant growth, evaluation or testing within the quarantine facility, returned to cold storage in primary containers or other suitable containers in said facility, or destroyed.

While plants are maintained under this permit, access should be restricted to authorized personnel as approved by the permit holder. Re-export or transportation of plant materials out of quarantine facility is not authorized until released. All operations must be consistent with information

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submitted in association with above listed APHIS facility inspection number.

8. All research activities, plant inoculations and subsequent disease development must occur within the APHIS approved Containment Facility identified above that has been inspected and found adequate for containment of the organisms received under this permit. Access to this facility must be restricted to authorized personnel.
9. The regulated articles transported under this permit must be grown for a period of 30 days within an isolated area of quarantine facility, as identified on the SOP. This area shall be free of other plants to observe the imported plants for the presence of mobile pests. Should plant pests be observed, the plants must be treated accordingly to remove the pest presence prior to relocating into the standard growing area of facility.

During this interval all mobile plant pests collected / isolated must be identified. Pest identification services and treatment recommendations are provided or facilitated by the USDA APHIS PPQ State Plant Health Director's office. Appropriate pest mitigation measures to eliminate mobile plant pests must be implemented as soon as practicable to prevent dissemination.

Plant material free of mobile plant pests or potentially air borne pathogens may be transferred to a standard growing area after 30 days, as described in the SOP, that is appropriate for the plant material, and for containment of potential plant pests.


10. Plants under this permit must be periodically monitored for arthropod infestation and/or plant disease symptoms. During this interval all mobile plant pests collected / isolated must be identified. Pest identification services and treatment recommendations are provided or facilitated by the USDA/APHIS/PPQ State Plant Health Director's office. The pests identified shall be recorded and documented onto the annual report submitted to the PPQ Permit Unit.

Plants must remain in the quarantine facility until target plant pests cannot be detected and mobile plant pests are treated to prevent pest dissemination; or destroyed by autoclaving, incineration, or chemical sterilization.

Measures to monitor for and control domestic mobile plant pests and/or disease vectors (e.g. black lights, yellow sticky boards, insecticides) must be in place in all areas of quarantine facility to minimize domestic mobile plant pest transmission of any plant pathogens. Treatments appropriate for any mobile pests that are identified on plant material must be applied in a timely fashion to prevent pest dissemination. Treated plant material must be subsequently observed and evaluated until verified as mobilpest-free or destroyed.

All initial disease diagnostic procedures, isolations, and culture transfers must be made in the appropriate areas of quarantine facility that minimizes the potential for pest dissemination into the outside environment.

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Plant inoculations and subsequent disease development using plant pests derived from regulated articles received under this permit, must occur in an approved area adequate for containment of these pests as identified in the SOP for quarantine facility.

No intentional vector transmission studies are allowed. For air borne pathogens the plants must be maintained in a facility that does not directly vent to the outside environment. Infected plant material maintained within these facilities must be located at a reasonable distance from clean plant material, soil supplies/potting media, any insectaries, and outside doors to prevent pest dissemination.

A regular pest control program must be maintained to prevent plant pest introduction or escape into the environment. Facilities must be maintained free of weeds.


Plants inoculated with plant pests must be safeguarded during transport among the laboratory, growth facility, and disposal facilities to prevent potential pest dissemination and escape.

11. Greenhouses must be screened to minimize presence of insect vectors.
12. Standard Operating Procedures (SOPs) must be filed with, and approved by, the APHIS PPQ Pest Permit Staff at: email: pest.permits@aphis.usda.gov; phone: 866-524-5421/4700; fax: 301-734-8700; address: River Road, Unit 133, Riverdale, MD 20737. All contact information must be kept current and the SOPs must be dated. If requirements in the permit conditions are more restrictive than the SOPs, permit conditions take precedence. APHIS PPQ must approve any changes to the SOPs before implementation.

A list of all persons with access to the containment facility must be maintained and available upon request by Federal or State Regulatory Officials.

13. Modifications to the containment facility or any changes that affect the containment of the regulated materials/organisms must be approved by APHIS prior to making changes. Please contact the Pest Permit Staff (email: pest.permits@aphis.usda.gov; phone: 866-524-5421; address: 4700 River Rd., Unit 133, Riverdale, MD 20737; Fax: 301-734-8700).
14. Records must be kept of all organisms maintained under this permit. Minimally the record will consist of the name of the organism identified to the lowest taxon possible, the country, or US state/territory, where each isolate was collected, and the date the isolate was received. These records must be made available to Federal and State regulators upon request.
15. When not working with the regulated materials/organisms, you must store and/or maintain them within the APHIS approved containment facility identified above. All stored regulated materials/organisms must be kept in a locked area with access limited to authorized personnel.

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16. Pest-free Status for the Quarantine Material:

All germplasm to be released must be derived from the source plants that tested negative. Only germplasm testing negative for quarantine pests, regulated non-quarantine pests, and other exotic pests can be released into the environment outside of containment for the purpose of establishing mother blocks following approval by USDA/APHIS/PPQ.

For any legal or contractual reasons the plant pests are to be maintained for a long duration of time, Occasional reculturing may be done to ensure long term viability. All reculturing must be done within the quarantine facility.

17. DEVITALIZATION AND WASTE DISPOSAL

All regulated materials/organisms and all items coming in direct contact or exposed to the regulated materials/organisms must be sterilized/sanitized/decontaminated prior to removal from the authorized containment facility. This includes all items from shipping, culturing, care, and maintenance of these regulated materials/organisms. This requirement includes but is not necessarily limited to: packaging directly exposed to the regulated materials/organisms, substrates (culture media, soil, plant materials (food materials or host plants)), leftover/unused/unneeded live cultures, and dead specimens/cultures unless specified otherwise in the permit.

All waste materials must be treated by one of the follow methods prior to disposal:

Use any of the following, either alone or in combination: 1) autoclaved (see protocol below), 2) disposed of as medical /biohazard waste with bonded contracted company (organisms and/or contaminated waste must be stored in sealed containers prior to pick up by this company), 3) incinerated, 4) immersed in 5 percent sodium hypochlorite (household bleach from the bottle is 5 percent) for at least 20 minutes, or 5) immersed in 70 percent alcohol for at least 30 minutes. Treated waste will be double bagged prior to disposal.


Other sterilization methods are only allowed with prior written agreement from the USDA/APHIS PPQ Pest Permit Staff.

Any equipment, supplies, tools, secondary shipping containers, packing materials (e.g, ice packs), etc. must be sterilized/sanitized/decontaminated prior to reuse, disposal, or removal from containment.

If using an autoclave the following protocol must be used:

- Waste must be autoclaved at 121 Celsius (250 Fahrenheit) for a minimum of 30 minutes at 15 psi.
- Autoclave tape or other indicators must be placed on each load prior to treatment. The autoclave tape or other indicator on each container must be checked to verify color change before disposal.
- The autoclave must be calibrated according to the manufacturer's instructions annually and a written record must be maintained.


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- d. Every 3 months, you must use a commercially available biological indicator kit that uses bacterial spores of *Geobacillus stearothermophilus* that are rendered unviable at 121 Celsius (250 Fahrenheit). You must follow the manufacturer's instructions. If any growth is observed, you must have the autoclave serviced and retested.
18. Devitalization/destruction of organisms and infected material may be conducted off site by a facility holding a valid PPQ compliance agreement prior to disposal. Vendor may or may not be in the same state. All organisms, contaminants and/or packaging materials must be in sealed containers during transport to this waste management facility in order to prevent any unauthorized dissemination of the regulated articles.
19. There is to be no further movement or distribution of the listed regulated materials/organisms within the United States and its territories unless the recipient holds, or is named as a responsible party on a valid PPQ526 permit for receipt of such materials/organisms.

END OF PERMIT CONDITIONS

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